

## Experience

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**2024**            **Post-doctoral Researcher, University of Nevada, Reno**

## Education

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**2022**            **University of California Santa Barbara, Santa Barbara, CA**  
PhD. in Environmental Science and Management

**2016**            **Indiana University, Bloomington, IN**  
Master of Science (M.S.) in Geography

**2013**            **Santa Clara University, Santa Clara, CA**  
Bachelor of Science (B.S.) in Environmental Science  
Minor in Economics

## Research Interests

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Ecohydrology, hydrologic modeling, hydroclimate, model development, GIS, ecoinformatics

## Publications

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Ren, J., Hanan, E.J., Greene, A., Tague, C., Krichels, A.H., Burke, W.D., Schimel, J.P., Homyak, P.M., 2024. Simulating the Role of Biogeochemical Hotspots in Driving Nitrogen Export From Dryland Watersheds. *Water Resources Research* 60, e2023WR036008. <https://doi.org/10.1029/2023WR036008>

Tague, C.N., Choate, J., Graup, L., Burke, W., Torres, R., Turpin, E., 2022. Two-scales of lateral moisture redistribution-and its importance for modeling drought impacts on ecohydrology. *Frontiers in Hydrology* 2022 237–174.

Burke, W., Tague, C.N., Kennedy, M., Moritz, M., 2020. Understanding fuel treatments: how treatments interact with climate and biophysical setting to affect fire, water, and forest health. *Frontiers in Forests and Global Change* 3, 143. <https://doi.org/10.3389/ffgc.2020.591162>

Burke, W.D., Ficklin, D.L., 2017. Future projections of streamflow magnitude and timing differ across coastal watersheds of the western United States. *International Journal of Climatology* 37, 4493–4508. <https://doi.org/10/gcj2qz>

Stewart, I.T., Bacon, C.M., Burke, W.D., 2014. The uneven distribution of environmental burdens and benefits in Silicon Valley’s backyard. *Applied Geography* 55, 266–277. <https://doi.org/10.1016/j.apgeog.2014.09.016>

## Teaching

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**University of California Santa Barbara**

Spring 2019    Teaching Assistant – ESM 232: Environmental Modeling

Winter 2018 Teaching Assistant – ESM 263: Geographic Information Systems  
Spring 2017 Teaching Assistant – ESM 232: Environmental Modeling  
Winter 2017 Teaching Assistant – ESM 215: Landscape Ecology

**Indiana University**

Spring 2016 Assistant Instructor – GEOG 109: Weather and Climate  
Fall 2015 Assistant Instructor – GEOG 109: Weather and Climate

**Santa Clara University**

Fall 2012 Teaching Assistant – ENVS 115: GIS in Environmental Science